OWA Inc.

1375 Pinellas Bayway, #29
Tierra Verde, Florida 33715-2133

William A. Ogletree
Chairman

Charles B. Husick
President

5 September 1995

Office of the Secretary
Federal Communications Commission
Washington, D.C. 20554

Reference: PR Docket No. 92-257

Amendment of the Commission's Rules Concerning Maritime Communications

Gentlemen:

In accordance with the instructions in paragraph 51 of the reference docket I have enclosed one original and 9 copies of my comments regarding the proposal to permit automatic interconnection with the PSTN. (Since the material was produced on a computer printer all copies may be considered originals).

I understand that by providing the multiple copies each commissioner will receive a personal copy.

If there are any questions regarding my submission please do not hesitate to contact me by phone, fax or letter.

Sincerely,

C.B. Husick

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Amendment of the Commission's Rules Concerning Maritime Communications

Gentlemen:

I hereby submit my comments pertaining to the PR Docket No. 92-257 and in particular to the proposals concerning Automatic interconnection with PSTN as described in B, 11 page 3 of FCC 95-177.

Executive Summary:

I am in favor of automatic interconnection with the PSTN.

I oppose the use of any desired protocol for achieving such automatic interconnection.

I believe that in the interests of safety a single, Country-wide protocol must be used.

I believe the single protocol for automatic interconnection with the PSTN should be the internationally coordinated Digital Selective Calling (DSC) system.

Vessels are by nature mobile. Large numbers of commercial and pleasure craft voyage over substantial distances each year. Use of non standard protocols for communication with the PSTN within the United States will impose an unnecessary burden on such vessels.

Vessels, including pleasure craft, routinely travel to areas outside the United States, including Canada, Mexico, The Bahamas and the countries of the Caribbean Basin and Central America. In my opinion, those jurisdictions, which I believe to be bound by the GMDSS agreement, are likely to use DSC as the protocol of choice for communication with their PSTN's.

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The primary purpose of marine radio has always been and continues to be safety signaling and communication. No operating system or protocol which will reduce or limit the effectiveness of marine radio communication in furtherance of safety should be permitted. In my opinion, the use of various and different protocols for interconnection to the PSTN will have a detrimental effect on safety signaling.

Detail Comments:

The primary purpose of marine radio has always been and continues to be safety signaling and communication. No operating system or protocol which will reduce or limit the effectiveness of marine radio communication in furtherance of safety should be permitted. In my opinion, the use of various and different protocols for interconnection to the PSTN will adversely effect safety signaling for the following reasons:

- The FCC has recognized the obligation of the United States to implement the provisions of the Global Maritime Distress and Safety System (GMDSS) of the SOLAS Treaty. The United States Coast Guard has petitioned the Commission to require that all maritime MF, HF and VHF transmitters sold in the United States after February 1, 1997 have at least minimum DSC signaling capability. All vessels subject to the GMDSS regulations will be required to equip with DSC capable transmitters in 1999. The Coast Guard has expressed concern that marine safety will be compromised if all vessels are not able to communicate effectively with one another.

- With the growing use of DSC on the marine VHF band, the monitoring of channel 16, the present calling and distress channel, will decrease and ultimately cease. To insure safety, it is therefore necessary to encourage, to the maximum extent possible, the use of DSC capable radio equipment on all vessels and shore stations, including voluntarily equipped vessels. Clearly, the use of the DSC protocol for communication with the PSTN will encourage the purchase and use of DSC capable VHF radios, including those which offer full DSC capability.

- While the desired wide spread use of DSC by voluntarily equipped vessels will be greatly encouraged if the DSC protocol is the single accepted standard for automatic interconnection with the PSTN, the use of different protocols for automatic interconnection with the PSTN will delay and diminish the desired and necessary widespread use of DSC by these vessels. The owner of a voluntarily equipped vessel, faced with the need to purchase an accessory piece of equipment for an existing marine VHF radio in order to use a proprietary protocol with a PSTN, may delay equipping with a DSC capable radio. Such delay may result in unnecessary threat to life and property in the event the vessel, equipped for communication with the PSTN, but is unable to use DSC. Such a vessel will be unable to automatically transmit a DSC format MAYDAY call or respond to such a call where it may be in a position to hear a DSC MAYDAY call from another vessel.

- To maximize safety, the ultimate goal of the Coast Guard and the Commission must be to maximize the penetration of DSC capable radio equipment in the entire fleet, including voluntarily equipped vessels. Experience with all related electronic devices clearly indicates that the cost of DSC capable VHF radios, especially those equipped to exploit the full capability of DSC, will be significantly reduced by the increased sales which will result if DSC is the only allowed protocol for automatic connection to the PSTN.

- As the Commission is aware, the use of a full capability DSC transceiver on the marine VHF band will contribute to safety in a number of important ways.

- MAYDAY signaling is greatly expedited by the automatic nature of the signal transmission.

- Automatic relay of distress calls will be of great value to many vessels which carry only VHF radios and frequently operate at or beyond the range of shore stations.

- With use of the DSC protocol for public coast stations, any distress message can be brought to the attention of an operator automatically. Since a DSC equipped coast station will automatically monitor for a response to the distress call, the screening of distress calls by the operator can be automatic. Only distress calls which go unanswered by other stations need be brought to the attention of the operator.

- The use of DSC signaling will reduce the number of hoax MAYDAY calls.

There are significant negative implications which accompany the use of a protocol, such as that proposed by WJG MariTEL:

- The non DSC protocol for automatic interconnection with the PSTN proposed by WJG MariTEL Corporation allows for automatic calling from the vessel to the PSTN, but makes no provision for automatic interconnection from the PSTN to the vessel. In my opinion, lack of automatic shore to ship calling, which is an inherent capability of the DSC system, will significantly reduce the value of the automatic interconnection system. It is also worth noting that the DTMF signaling protocol proposed by WJG MariTEL can be accommodated by a DSC equipped public coast station, while the WJG MariTEL proposed system is totally incapable of accommodating DSC signaling. In order for a DSC capable radio to operate with the WJG MariTEL system the manufacturer of the radio must build-in special circuitry, or the owner must add special equipment to the radio. The likelihood of a manufacturer building in the circuitry needed for use with the WJG MariTEL protocol is limited by the fact that this protocol will not be a national standard, thus limiting the probable market for the necessarily more expensive hybrid radio.

In my opinion, untrue statements have been made pertaining to the cost of equipping public coast stations for DSC operation:

- Statements have been made by persons promoting the use of protocols, other than DSC on the marine VHF band, that the cost of equipping a public coast station for DSC is prohibitively expensive. I submit that this is not necessarily true. A public coast station, presently monitoring both channel 16 and one or more working channels will, with DSC, not be required to monitor channel 16 for emergency transmissions. The antenna and transceiver now used for channel 16 can therefore be used for service on channel 70, the DSC digital communication channel. For this station, the only additional equipment required for full DSC service will be a controller, which will likely consist of a PC type computer and software.

- Equipment price estimates from a highly qualified supplier of VHF DSC vessel and shore station equipment indicate that the cost of the entire

controller / software package, purchased in reasonable quantity, is on the order of $2,000.

- Where a station does not presently monitor channel 16 it would be necessary to add an antenna, transceiver and associated cabling. The cost of such equipment, purchased in reasonable quantity, is estimated to be less than $5,000, including installation. Protests that the cost of equipping a public coast station for use with the DSC protocol are too high to be economically viable therefore appear to be without foundation.

- The economic viability of a DSC capable public coast station will surely be enhanced by the additional traffic which will be generated by the ability of a DSC based system to automatically call a vessel. The length of today's manual system call lists of messages for vessels at sea testifies to the need for such shore originated communications. It is therefore reasonable to expect a significant increase in shore origin traffic when the use of DSC's automatic vessel calling, group calling and polling capability becomes known. It is important to note that with a full capability DSC VHF radio it is possible for a shore station to call a ship station which is unattended and leave a "call waiting" message. This feature can be invaluable in cases where there is urgent need to communicate with the ship station.

- Arguments have been offered which claim that the cost of a full capability DSC VHF radio will be too high to permit wide spread use of the equipment on voluntarily equipped vessels. Evidence from other related improvements in technology, color television, Citizens Band Radio, Cellular Radio and small computers does not at all support such a contention. With adoption of DSC as the national standard design and production of DSC radios will increase. The price / value and unit sales records of all other related electronic equipment clearly indicate that the cost of full function DSC VHF radios will plummet.

- The desire of public coast station owners to eliminate the presence of an operator at selected sites is as practical with use of the DSC protocol as with any other protocol. As mentioned above, the use of DSC will allow automatic alerting of remotely located operators, or automatic signaling to appropriate local authorities, in the event a distress message is monitored and no response is heard.

DSC works very well on the marine VHF band:

I have extensive personal experience with the use of a full feature DSC radio (Ross DSC 500) on my boat in communicating with the U.S. Coast Guard, St. Petersburg, Florida, the local public coast station operated by GTE and other vessels equipped with VHF DSC radios. (The Bonne Étoile, Call Sign WYQ9882, DSC Ship Station Identity 366057070000). I have found the convenience of the DSC protocol in communicating with the PSTN to be fully equal to that of Cellular Telephone.

Communicating with the Coast Guard while their experimental DSC installation was operational in St. Petersburg, Florida was equally facile. Communication with other DSC equipped vessels, without the necessity for constant monitoring of channel 16, is outstanding. Today, with the Coast Guard's automatic DSC base station no longer operational in the Tampa Bay area, it is possible to establish immediate communication with Coast Guard St. Petersburg, through their Ross DSC 500 radio, by simply broadcasting an ALL SHIPS call.

Conclusion:

In my opinion, the over riding interests of maritime safety require that the Commission assure the use of a single national standard for all automatic communications with the PSTN.

I believe the evidence clearly shows the need for the standard protocol to be DSC.

Arguments that the cost of equipping public coast stations for DSC are so high as to make them uneconomic appear to be based on seriously incorrect data. I urge the Commission to carefully investigate this matter, preferably by soliciting proposals for equipment and software from qualified suppliers who can show proven ability to deliver automatic DSC shore station equipment. Similar statements regarding the cost of radios for vessel use also deserve investigation.

I suggest that the Commission carefully consider the events which preceded and followed the adoption of the NTSC Color standard for U.S. television. Prior to the implementation of a single standard the cost and availability of both broadcasting station equipment and receivers was beyond economic reach. Following the adoption of a single standard, the technical and economic energy of the television laboratories and factories made color TV commonplace in much less time and at lower cost than had been forecast by industry observers and analysts.

The Commission and many users of the Public Safety Radio Services have heretofore opposed allowing use of proprietary protocols in this service. Maritime radio is no less devoted to safety than is this class of service. The Commission's recognition of the indisputable safety role of maritime radio is clearly stated in paragraphs 2 and 3 of this docket.

The positive safety aspects of the universal use of DSC are overwhelming when compared with the very questionable value of allowing use of various and non standardized protocols for automatic connection to the PSTN.

I will be pleased to supply such further comment and information as the Commission may wish.

Sincerely,